

CLAIMS

1. (Currently amended) A device for relieving pain associated with the vertebrae of the cervical spine and surrounding tissues and structures, by maintaining and/or adding distraction between adjacent cervical vertebrae when positioned between the spinous processes of adjacent cervical vertebrae, without detracting from the rotation of the cervical vertebrae relative to each other, the implant comprising:

[[1.]]a wedge-shaped spacer;

[[2.]]a wedge-shaped wing; and

[[3.]]a wedge-shaped distraction guide.

2. (Original) The implant of claim 1 wherein the spacer has smooth, flat surfaces and smooth, rounded edges to create a wedge for varying distraction of adjacent cervical vertebrae.

3. (Original) The implant of claim 1 wherein the cross-sectional shape of the wing has smooth, flat surfaces and smooth, rounded edges to create a wedge for varying distraction of adjacent cervical vertebrae.

4. (Original) The implant of claim 1 wherein the wing is continuous with the spacer.

5. (Original) The implant of claim 1 wherein the distraction guide is continuous with the spacer.

6. (Original) The implant of claim 1 wherein the spacer is rotatable.

7. (Original) The implant of claim 1 including a second wing.

8. (Original) The implant of claim 1 wherein the spacer can rotate relative to the wing and the distraction guide.

9-10. (Canceled)

11. (Currently amended) A device for relieving pain associated with the vertebrae of the cervical spine and surrounding tissues and structures, by maintaining and/or adding distraction between adjacent cervical vertebrae when positioned between the spinous processes of adjacent cervical vertebrae, without detracting from the rotation of the cervical vertebrae relative to each other, the implant comprising:

[[1.]]a wedge-shaped distraction guide;

[[2.]]a wedge-shaped spacer associated with the wedge-shaped distraction guide, which spacer, when urged between the spinous process of the adjacent cervical vertebrae, allows flexion but not extension of the neck and creates a contact surface with the bone of the spinous processes that increases as the wedge-like spacer moves anteriorly, whereby the implant distributes the distraction forces on the spinous processes over the contact surface; and

[[3.]]a wedge-like wing extending from and continuous with one end of the spacer to maintain lateral placement of the spacer.

12. (Original) The implant of claim 11 wherein the spacer is rotatable.

13. (Original) The implant of claim 11 wherein the spacer is rotatable relative to said wing.

14. (Canceled)

15. (Original) The implant of claim 11 wherein the spacer can rotate relative to the wing and the distraction guide.

16. (Canceled)

17. (Original) The implant of claim 11 wherein the cross-sectional shape of the spacer is selected from the group consisting of tear-drop, wedge, ellipse, and oval.

18. (Currently amended) An implant for relieving pain associated with adjacent cervical vertebrae of the spine, that have a range of rotation relative to each other in a scissor-like motion, which implant is positionable between the spinous processes of adjacent cervical vertebrae, the implant comprising:

[[1.]]a wedge-shaped spacer;

[[2.]]a wedge-shaped first wing connected with the spacer;

[[3.]]a wedge-shaped distraction guide, the distraction guide extending from the spacer at the end distal to the first wing; and

[[4.]]a wedge-shaped second wing that connects with the spacer.

19. (Original) The implant in claim 18 wherein the spacer has a cross-sectional shape selected from the group consisting of tear-drop, wedge, ellipse, and oval.

20. (Canceled)

21. (Original) The implant of claim 18 wherein the spacer is rotatable.

22-25. (Canceled)

26. (Original) The implant in claim 13 wherein the first wing and the second wing have an anterior side and a posterior side, and the anterior side of the first wing and of the second wing are angled outward relative to each other to accommodate the anatomy of the adjacent spinous processes of the cervical spine.

27-28. (Canceled)

29. (Original) The implant of claim 18 wherein a hole of the second wing allows the second wing to be received over the distraction guide to connect with the spacer toward the end of the spacer adjacent to the distraction guide.

30-35. (Canceled)

36. (Original) A method for implanting an implant between the spinous processes of cervical vertebrae comprising the steps of :

inserting a first portion of the implant including a spacer and a distraction end laterally; inserting a second portion of the implant including a wing laterally from an opposite direction from the insertion of the first portion; and

fastening the second portion to the first portion.

37. (Original) The method of claim 36 wherein the fastening step includes interference-fitting the second portion onto the first portion.

38-39. (Canceled)

40. (Original) The method of claim 36 including implanting the implant without severing the ligamentum nuchae.

41. (Original) The method of claim 36 including implanting the implant without altering the spinous processes.

42. (Original) A device that can relieve pain associated with the spine and the tissues surrounding the spine comprising:

a first wing;

a spacer;

a distraction guide;

wherein said spacer is elongated in cross-section and said first wing is elongated in cross-section in the same direction that said spacer is elongated; and said distraction guide extends from said spacer.

43. (Original) The device of claim 42 wherein said first wing and said spacer are wedge-shaped in cross-section.
44. (Original) The device of claim 42 wherein said first wing and said spacer are wedge-shaped in cross-section with the wedge shape of the first wing points in about the same direction as the wedge shape of the spacer.
45. (Original) The device of claim 43 including a second wing that is wedge-shaped.
46. (Original) The device of claim 42 including a second wing having an aperture that is shaped to be received over the distraction guide.
47. (Original) The device of claim 42 wherein said distraction guide extends from the spacer and the second wing has an aperture that is shaped to be received over the distraction guide and engaged with the spacer.
48. (Original) The device of claim 42 wherein said first wing is elliptical in shape and the spacer is wedge-shaped.
49. (Original) The device of claim 48 wherein said second wing is elliptical in shape.
50. (Original) The device of claim 42 wherein said spacer is rotatable.
51. (Original) The device of claim 42 wherein said spacer is rotatably mounted relative to the first wing and the distraction guide.
- 52-61. (Canceled)
62. (Original) The method of claim 36 including implanting the implant without severing the supraspinous ligament.

63. (Original) The device of claim 42 wherein the first wing is selected from the group consisting of wedge-shaped, elliptical-shaped, tear drop and ovoid-shaped.
64. (Original) The device of claim 42 including a second wing that can fit over the distraction guide, which is selected from the group consisting of wedge-shaped, elliptical-shaped, tear-drop shaped and ovoid shaped.
65. (Original) The device of claim 42 wherein said spacer is selected from the group consisting of any wedge-shaped, elliptical-shaped, tear drop shaped and ovoid shaped.